

AACTCCTTCTACACCGAAGGAATCCTATGACTATCAGGCAGCCTGTGCCCTCAGCCTCTGGAAACC  
 TGGGTGCTGCACCCCGGGGTGCTTGTGCCACCATTGCAGATTCTTAACCTGGCCTGGTGGACCTC  
 TGCTGCCGCTGGCCTTATTCCAGCAGCTACTCTATGGTCTCATCTACAGCTGGTCCAGGCAGAC  
 CCGGCAGAACAGCTGAGGGCAGCCCCGAGACGCGCAGAGCAGCTCGTCATGAAACAGACCCAGTACTACT  
 TCGGCTCGGTGAACGCATCCTATAATGCCATCATTGACTGCGAAACTGCAGCAGGCTGTTCCATGCGCA  
 GAGACTGACCAACACCAATCTCTGTTGCGAGAACGCCGAGCAGCTGAGCTGGTGCAGAGACCGAGATACC  
 CGGCTGCTGCAGAAGGAGACACACTCGGACGGCCGGAGCAGTGTGAGCTGGTGCAGAGACCGAGATACC  
 GAAGAGGTCCGCACATCTGTTTACTACAATGCGACGGAAGATACTCAGACTGTGGCGCGGAGCCTC  
 CTTCCTCCGTCGCTGGCGTCTGGTTCTGCAGCTTTGCTCCTCTGGCCTGCCACCTCGGCCG  
 CAGCCTCAAGTCCACTCCTCGCTGCCCTCGCACCTCTGAGCGACCCACACACACACATCATACCCCC  
 GCCTTGGCCTCCTAGCCTTCGCTCACCCCTCCATTCCACATCCCCAATCTAGAGCCTGGCCACTCTC  
 TCCTGAAGGACCTGGGTCCTCCCCGGAGCCTGTCCTGGGAGGGGAACCCCAAAGTAAGGTGCC  
 ATGGTGTTGGCACTCAAGATTAGCTCACCTGAACGTCCAAGTGCCAGTCCACTGACTCATCC  
 CCGTGGCTAGGACAGGAGGCCACTAGTACTGATGCCAAACCAGGCCTCACCAGCACCCACCTGCCTGGAG  
 ATTTCCTCTATGTAGGCAACCCGCCACTGCTGGCACCTCTAACTGGCCCTTGGCCCACCCAAAGGCC  
 AAACATTACCTCTGGGGAAAAAAAAGGAAAGATGGTAATAGTGAGAGATTGGGGGACCCCCCTC  
 CCCATTGGTTCTGGCCCTTCAGGCTACAACCCCCCAGCCTGCAGGTGTCAGAACAGTCACAATGA  
 CATCAGTTAGACACATGCCATATACACTGGATCTCTGAGAGCAGAAACCCAACTCTCACTAGACATAC  
 CTGTGATGGAACACACAAACAGACACGCACCATGGGGGTGGCCACAAAGCCTACACAAGGGGAGATG  
 TCAATGAAGGGTTGGCCTGTGTTCCATCTCTGCTCACCTCTGCTACTCTGAGATGCAGCCTGGC  
 TGATCCTCCATCTCTAAACTGAATGTCAAACCGTGCCTGAATGCTGGGGGGGGGAGACCTCTGT  
 TTCAACCTAGCCACCAAGTGTCCCCAAGTGCCTCACCTGCCAGGTGCTATTGTAACCATGTTCAC  
 CAGTGTCCGGCCCTAGTAGGACCAACACACTGCCTGAACCTCTGGCAGAGAACCCACCAGACA  
 TTGAGACATTGTATTGCTTAGCAGGGATGAGTTGGTCTCTCCTGGCTGGCCATCCCATCCCCAATC  
 TGGTTCTGCACACTCAGGCCTAATTCCCTCTGCACACACACACACACACACACACACACAC  
 ACACACACACAGTCCCTGCCCTAGGAGGCCAAATTACCCCTCCCTGCTGAACACACCCCTGCACCATG  
 CACATGTCTAACCAACCGTACTGCACACACAGAGGTGGACCTGGACACATCTTTACACCTTCAATT  
 CTGTCATTCTCCAAAGGCATCGTAACCTGGGGCCAGGAGGGACTGAGGGCAGGGGGAGGGGTGT  
 AGCTGTGAGGCTCAGATGGACTGGGAGGGGGAGGGTGTACATTAATTAAATGGCTTCGTTAATTAA  
 TGTGATGTTGCTTGTGCTTCTCAGTGTGTATGGTCCATGCCAGTGCTGGTGTGACAGGGTGGGTATC  
 CATGATGTGTGCCAGCCTGGATGTCAGCTGTGTGGGGCGTGTGTAACTGTAGTGTAGTCAG  
 GTGCTCAACGGAGAATATAACAAAAAGAAACAAACAGTATAACAGAAAAATAATGTATATTAA  
 GTTAAAGACAAATGAAACCAGACAAACAAATCCCCATCAGGTAGTTGTCACCCAGCTGGTTCAA  
 CCCTCTCATTACCCACCTGACCTAGCTGTCCCCCTACTGTGGGCTGGGGACTTGGGGCCATTCCCTT  
 GCCCTTTTTGTTATTCTATTGTACAGACAAGTGGAAAACAACAGCGACAAAAAGTC  
 GAGAAACTTGTAAAATATTGTGTGTGATTCTTGTAAAATATTCAAATGGTTATTACAGAAGAT  
 CAGTTATTAAATAATGTTCATATTTCACCTC (SEQ ID NO:1)

## FIGURE 1

NSFYTRKESYDYQAACAPQPPGNLGAAPRGVFVPTIADFLNLAWWTSAAAWSLFQQLLYGLIYH  
SWFQADPAEAEGSPETRESSCVMKQTQYYFGSVNASYNAAIDCGNCSRLFHAQRLTNTNLLFVV  
AEKPLCSQCEAGRLLQKETHSDGPEQCELVQRPRYRRGPHICFDYNATEDTSDCGRGASFPPSL  
GVLVSLQLLLLGLPPRPQPQVHSFAASRHL (SEQ ID NO:2)

**FIGURE 2**

underlined = deleted in targeting construct

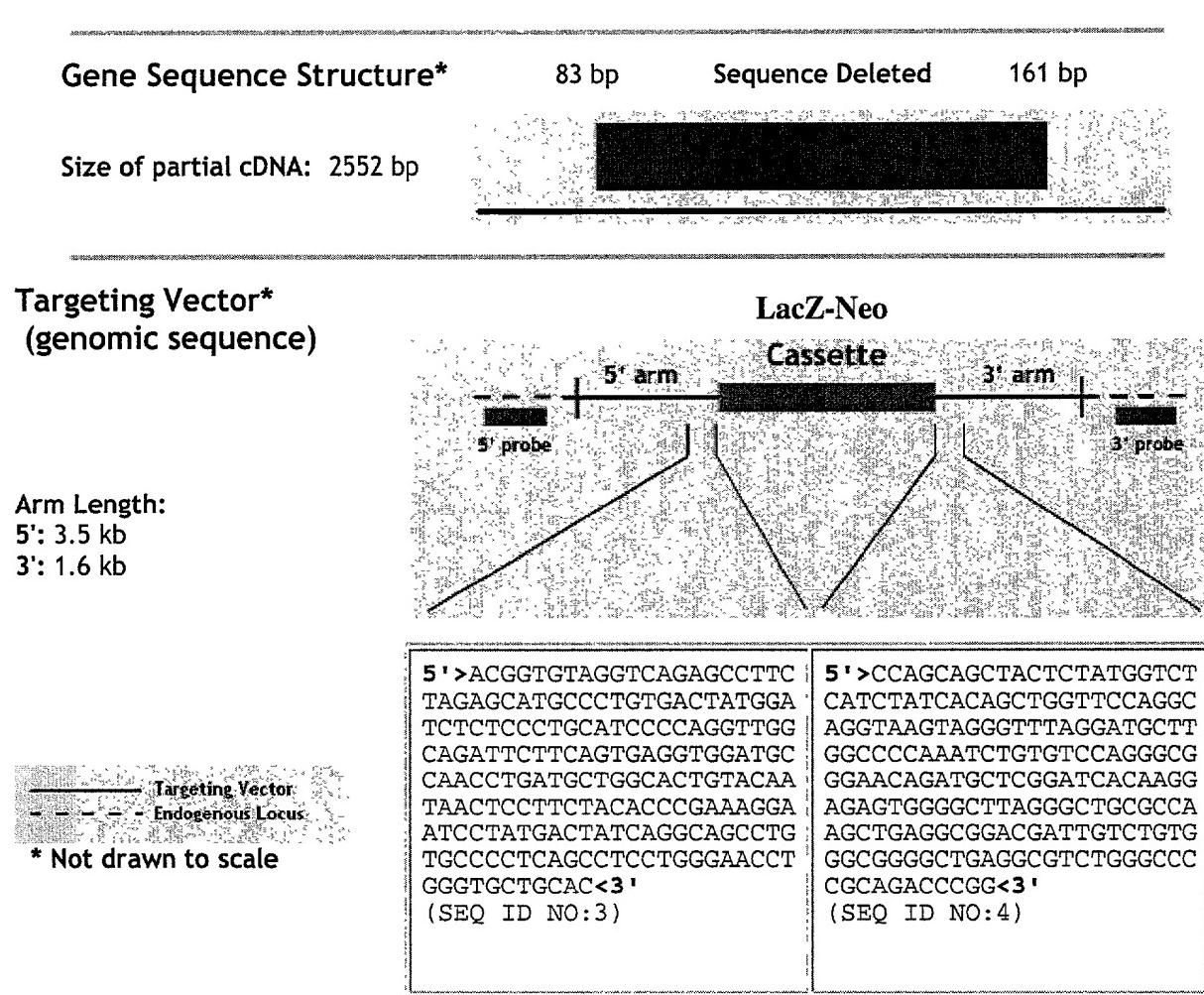
**BOLD** = sequence flanking Neo insert in targeting construct

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AACTCCCTCTACACCCGAAAGGAATCCTATGACTATCAGGCAGCCTGTGCCCTCAGCCT
CCTGGGAACCTGGGTGCTGCACCCGGGGTGTCTTGCCCACATTGCAGATTTCTT
AACTTGGCTGGGACCTCTGCTGCCCTGGCTTATTCCAGCAGCTACTCTATGGT
CTCATCTATCACAGCTGGTCCAGGCAGACCGGCAGAAGCTGAGGGCAGCCCCGAGACG
CGCAGAGCAGCTGCGTCATGAAACAGACCCAGTACTACTTCGGCTGGTGAACGCATCC
TATAATGCCATCATTGACTGCGAAACTGCAGCAGGCTGTTCCATGCGCAGAGACTGACC
AACACCAATCTCCTGGTGGCGAGAAGCGCTGTGCAGCCAGTGCAGGCGGGC
CGGCTGCTCAGAAGGAGACACACTCGGACGGCCGGAGCAGTGTGAGCTGGTGCAGAGA
CCGAGATACCGAAGAGGTCCGACATCTGTTTGACTACAATGCGACGGAAGATACC
GACTGTGGCCGCGGAGCCTCTCCCTCCGCTGGCGTCTGGTTCCTGAGCTT
TTGCTCCTCTGGGCCTGCCACCTCGGCCAGCCTCAAGTCCACTCCTCGCTGCCTCT
CGCCACCTCTGAGCGACCCACACACACATCATACCCCCGCCTGGCCTCTAGCCTT
CGCTCACCCCTCCATTCCACATTCCCAACTCTAGAGCCTGGCCACTCTCCTGAAGGA
CCTGGGTCCTTCCCCGGAGCCTGTGCCTGGGCAGGGGAAACCCAAAGTAAGGTGCC
ATGGTGTGTTGGCACTCAAGATTAGCTCACCTTGAACTGTCCAAGTGCCCGCAGTCCT
AGACTCATCCCGTGGCTAGGACAGGAGGCCACTAGTACTGATGCCAAACCAGGCCTCC
ACCGACCCACCTGCCTGGAGATTCCCTATGTAGGCAACCCGTGCTGGGCACCT
CTAACTGGCCTTTGGCCCCACCCAAGCCAAACTTACCTCTGGGGGAAAAAAAAAG
GAAAGATGGTAATAGTGAGAGATCGGGGGCACCCCTCCCCATTGGTTCTGGCCTT
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GACACATGCCATATACACTTGGATCTCTGAGAGCAGAAACCCAACTCTCACTAGACATAC
CTGTGATGGAACACACAAACAGACACGCACCATGGGGGTGGCCACAAAGCCTTACACA
AGGGAGATGTCAATGAAGGGGTGGGCTGTGTTCATCTGCTCACCTCTGCCCT
ACTCTGAGATGCAGCCTGGCTGATCCCACATCTCTAAACTGAATGTCAAACCGTGCCA
AATGCTGGGGGGGGGGGGAGACCTCTCTGTTACCCCTAGCCACAGTGTCCGGCCCCAGTG
CCCCTCACCCTGCCAGGTGCTATTGTAACCATGTTACCCAGTGTCCGGCCTTAGTAG
GACCACACATCATGCCTAACTCTTGGCAGAAGAACCCACAGACATTGAGACATT
GTATTTGCTTAGCAGGGATGAGTTGGTCTCTCTGGTGGGCATCCCATCCCCAATC
TGGTTCTGCAACTCAGGCTAATTCCCTCTGCACACACACACACACACAC
ACACACACACACACACAGTCCCTGCCCTAGGAGGCCAATTACCCCTCCTTGGT
GAACACACCCTTGCACCATGCAATGTCTAACCAACCGTACTGCACACACAGAGGGTGG
CCTGGGACACATCTTACACCTTCATTCTGTCATTCTCCAAAGGCATCGTAACTT
GGGGGCCAGGGAGGGACTGAGGGCAGGGGGAGGGGTGTAGCTGTGAGGGTCAGATGGA
CTGGGAGGAGGGGGAGGGTGATACATTAATTATGGCTCGTTATTAATGTCATGTTG
CTTGTGCTTCTCAGTGTGTTATGGTCCATGCCAGTGTGTGGTGACAGGGGGGTTATC
CATGATGTGCCAGCCTGGATGTCAGCTGTGTCCGTGGGGCGTGTGTTACTGT
GTGTAGTCAGGTGCTCAACGGGAATATAACAAAAAAAGAAACAAACGTTATACAGA
AAAATAAATGTTATTTAAGTTAAAGACAAATGAACACAGACAAACAAATCCCCATCA
GGTAGTTGCCACCCCAAGCTGGGTTCAACCCCTCTCATTACCCACCTGACCTAGCTGTC
CCCTTACTGTGGCTGGGGACTGGGGCCATTCCTTGCCCTTTTTGTTTGTT
TTCTATTTGTACAGACAAGTGGAAACACAGCGACAAAAAAAGTCGAGAAACTTT
GTAAAATATTGGTGTGTGATTCCTTGTAAAATATTTCAAATGTTTATTACAGAAGA
CAGTTATTAAATGTTCAATTTTCACT

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**FIGURE 3**

**FIGURE 4**